

## 16 August 2010 R/V Ferrel Status Report, Cruise 6 – Day 3

Compiled by Zach Weber, Chief Scientist

### 1.) Site Conditions, Daily Activities and Sampling Locations

The Ferrel spent the day approximately 65 miles South West of the well head conducting casts along transect 4 continuing from the previous day. The Ferrel arrived to its first sample location at 0703 64 miles South West of the well head and sampled two locations: Transect 4 Station 2 and Transect 4 Station 1. Weather conditions: Air Temperature 85 degrees Fahrenheit, seas 2-3 feet, current 1-2kt out of the North, winds 15-20kts out of the South West, cloud coverage increased throughout the day to 100%. Two CTD casts were undertaken to try to locate and sample remnants of the dispersed oil plume that may be around the 1150m depth as indicated by a dip in dissolved oxygen levels and a rise in fluorescence in the water column. The cast (T4 S2) was conducted with a reading of 1334m of depth to the seabed, showed no visible peak in fluorescence, but did show slight depressions in dissolved oxygen. The cast (T4 S1) was conducted with a reading of 1213m of depth to the seabed, showed no visible peak in fluorescence, but did show slight depressions in dissolved oxygen. Field analyses included dissolved oxygen, fluorescence, temperature, pH and salinity. Water samples were also collected for further chemical and microbiological analyses at 4 depths on each the casts (at 200m, 950m, 1070m, and 1200m on cast 1 and 200m, 950m, 1080m, and 1200m on cast 2). In addition, surface water samples were collected for microbiological analyses at both locations.

The results of the CTD casts were:

Station	Position from wellhead	Fluorescence signal	Signal depth	Comment
BP-TN12-SS05 (T4 S2)	66 miles SSW	None	N/A	DO decline with narrow depression of <0.1 mg/l at 1070m. Seabed at 1334m..
BP-TN12-SS06 (T4 S1)	64 miles SSW	None	N/A	DO decline with narrow depression of <0.1 mg/l at 1080m. Seabed at 1213m.

### 2.) Air Quality

Not required.

### 3.) Science Crew

Name	First Name	Affiliation	Role
Weber	Zach	CTEH	Chief Scientist
Jessich	Michael	Entrix	Water Sampler
Alex	Hill	CTEH	Water Sampler
Smith	Craig	C&C	Party Chief Team
Burke	Emily	C&C	Oceanography Team
McLeod	Alex	C&C	Oceanography Team
Reid	Francine	LBNL	Microbiologist
Joyner	Dominique	LBNL	Microbiologist
Summers	Kaitlyn	NOAA	Data Manager

